Amendments to the Specification

Please replace paragraph [0027] with the following amended paragraph:

[0027] In the bottom diagram of Fig. 3, the base 16 contains a thumb wheel 22 which is used for z-axis alignment. The thumb wheel 22 allows the detector or chip 14 to be moved toward the shadow mask 12. A top plate ~~24~~ connects the disc 10 to the commercial mask aligner 26 via four screws 24. The shadow mask 12 is held above the detector or chip 14 so that the shadow mask 12 and the detector or chip 14 are not in contact.

Please replace paragraph [0028] with the following amended paragraph:

[0028] In the following example, indium bumps are grown on a pixilated CZT detector. The CZT substrate is obtained with an 8x8 array of pixels and precision alignment marks on the CZT surface. The pixilated CZT detector is mounted on the base 16 of the alignment fixture (fixture) (Fig. 3) and constrained in place with a compatible adhesive agent, such as "photoresist", that is placed on the non-pixilated CZT surface. The photoresist is then cured by heating at 95°C for 2 minutes. A clean Teflon shim of the same thickness as the desired height of the indium bumps (i.e., the shim had a thickness of between

about 10 to 100μm), is placed on top of the CZT. The shadow mask, containing an 8x8 array of holes (Fig. 1), is then mounted into the fixture's shadow mask constraining ring (disc 10) (using mounting holes 8) and constraining ring is locked into place with screws 18 above the CZT detector. The fixture's height adjustment feature, the thumb wheel ~~20~~ 22, is then employed to precisely adjust the height of the CZT, so that the CZT, Teflon shim, and shadow mask are in contact. This arrangement is locked into place with mechanical hardware and the shadow mask constraining ring along with the Teflon shim are removed. The shim is removed and the shadow mask retaining ring (disc 10) is then replaced on the fixture and locked into place. The resulting gap between the CZT and the shadow mask has a fixed precision value corresponding to the desired bump height.